

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application:

Listing of the Claims:

Claims 1-22 (canceled).

1 Claim 23 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure comprising a gas or fluid-tight body  
3 overwound as an isotensoide with ~~a number of~~ one or more  
4 fibre filaments, the fibre filaments having a longitudinal  
5 axis defined along their length, whereby wherein the radius  
6 of the body varies with respect to a rotation-symmetrical  
7 axis of the pressurizable structure, such that said body  
8 comprises ~~a number of~~ at least one concave surface section  
9 spaced apart from the axial ends, ~~each having~~ wherein each  
10 concave surface section has a local minimum radius, and a  
11 number of and further comprising at least one convex surface  
12 section spaced apart from the axial ends, ~~each having~~  
13 wherein each convex surface section has a local maximum  
14 radius, characterized in that wherein at least one concave  
15 surface section is continuously overwound with a fibre  
16 filament as an isotensoide.

1  
1 Claim 24 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure according to claim 23, ~~characterized~~  
3 ~~in that~~ wherein the fibre windings in filaments overwinding  
4 the at least one concave surface section comprise a  
5 ~~non-pressurized state of the structure a multiple number~~  
6 plurality of substantially straight fibre filaments forming

7 a hyperboloid ~~when the at least one concave surface section~~  
8 ~~is non-pressurized.~~

1  
1 Claim 25 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure according to claim 23, ~~characterized~~  
3 ~~in that the fluid-tight body wherein the pressurizable~~  
4 ~~structure~~ is quasi-geodesically overwound in a continuous  
5 fashion.

1  
1 Claim 26 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure according to claim 23, ~~characterized~~  
3 ~~in that~~ wherein the longitudinal orientation of the fibre  
4 filament along a finite length thereof is oriented  
5 substantially perpendicular with respect to the  
6 rotation-symmetrical axis of the structure.

1  
1 Claim 27 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure according to claim 23, ~~characterized~~  
3 ~~in that~~ wherein the fibre ~~in a pressurized state undergoes~~  
4 ~~torsion with respect to its longitudinal center line, so~~  
5 ~~that~~ filaments undergo torsion with respect to the  
6 longitudinal center-line of the pressurizable structure when  
7 the pressurizable structure is in a pressurized state,  
8 whereby substantially one side of the curved fibre remains  
9 in contact with the body in the at least one concave surface  
10 section.

1  
1 Claim 28 (currently amended): ~~Fibre~~ A fibre reinforced  
2 pressurizable structure according to claim 23, characterized  
3 in that in a pressurized state there is reversal of the side  
4 of the fiber filaments in contact with the at least one  
5 concave surface section relative to the side of the fiber

6 filaments in contact with the at least one convex surface  
7 section.

Claims 29-38 (canceled).

1 Claim 39 (new): A fibre reinforced pressurizable structure  
2 according to claim 23, wherein the body is flexible, i.e.,  
3 non-rigid, and the fibre filaments are supported by a matrix  
4 material.

1  
1 Claim 40 (new): A fibre reinforced pressurizable structure  
2 according to claim 23, whereby the axial length of at least  
3 one axial section of the pressurizable structure is variable  
4 with respect to the longitudinal axis of the pressurizable  
5 structure.

1  
1 Claim 41 (new): A fibre reinforced pressurizable structure  
2 according to claim 23, wherein at least one axial section of  
3 the pressurizable structure is pivotable with respect to the  
4 longitudinal axis of the pressurizable structure.

1  
1 Claim 42 (new): A fibre reinforced pressurizable structure  
2 according to claim 23, wherein at least one axial section of  
3 the structure is pivotable with respect to an axis, wherein  
4 the axis is orthogonal to the longitudinal axis of the  
5 pressurizable structure.

1  
1 Claim 43 (new): A fibre reinforced pressurizable structure  
2 according to claim 40, wherein at least one axial section of  
3 the pressurizable structure comprises a combination of at  
4 least two of the following technical elements; (i) at least  
5 one axial section of the pressurizable structure is

6     pivotal with respect to the longitudinal axis of the  
7     pressurizable structure; (ii) the axial length of the at  
8     least one axial section of the structure is variable with  
9     respect to the longitudinal axis of the pressurizable  
10    structure; (iii) the axial section of the structure is  
11    pivotal with respect to an axis, wherein the axis is  
12    orthogonal to the longitudinal axis of the pressurized  
13    structure.

1  
1     Claim 44 (new): A fibre reinforced pressurizable structure  
2     according to claim 23, wherein the pressurizable structure  
3     comprises a one, two or three dimensional arrangement of a  
4     plurality of pressurizable fuel tanks or pipelines.

1  
1     Claim 45 (new): A fibre reinforced pressurizable structure  
2     according to claim 24, wherein the pressurizable structure  
3     further comprises a spring that provides a load-displacement  
4     function.

1  
1     Claim 46 (new): A fibre reinforced pressurizable structure  
2     according to claim 23, wherein the pressurizable structure  
3     further comprises an actuator for applications in elevators,  
4     excavators and industrial robots, among others.

1  
1     Claim 47 (new): A fibre reinforced pressurizable structure  
2     according to claim 23, wherein the pressurizable structure  
3     provides a shoring or strutting function in combination with  
4     construction beams.

1  
1     Claim 48 (new): A fibre reinforced pressurizable structure  
2     according to claim 47, wherein the shoring or strutting  
3     functions in combination with construction beams are

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4      adaptable to the Eigen-frequencies of the pressurizable  
5      structure.